PROMISE Vess™ A2000 Series

Storage Solutions Designed for Surveillance

Vess A2200 & A2600 NVR Storage Appliances

Features

Optimized for Surveillance
NVR storage appliance optimized for IP video surveillance

Extensive VMS Support
Certified/tested with the world's leading video management software

Midsize to Large-Scale Solutions
Ideal for up to over a hundred full-HD IP cameras making it perfect for banking, retail, gaming, manufacturing, and many more industries

Cost Effective & Scalable
Integrated solution results in less management overhead, plus it's easy & affordable to add capacity with the Vess R2000 external storage series

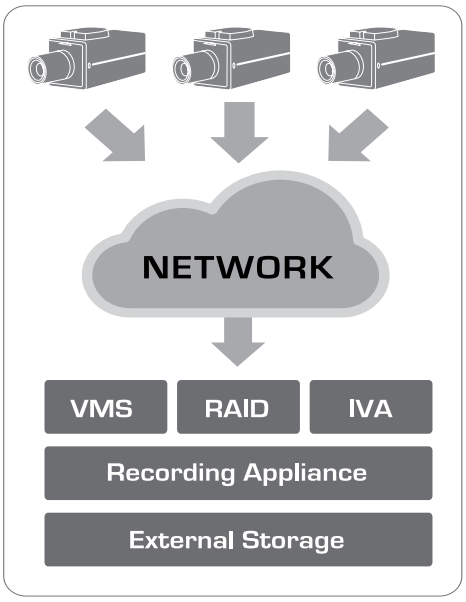
Easy to Administer & Maintain
Hot swappable drive bays, redundant power supplies, & One Plug Auto Service ensure Vess is incredibly easy to administer & maintain

Engineered for Video Surveillance

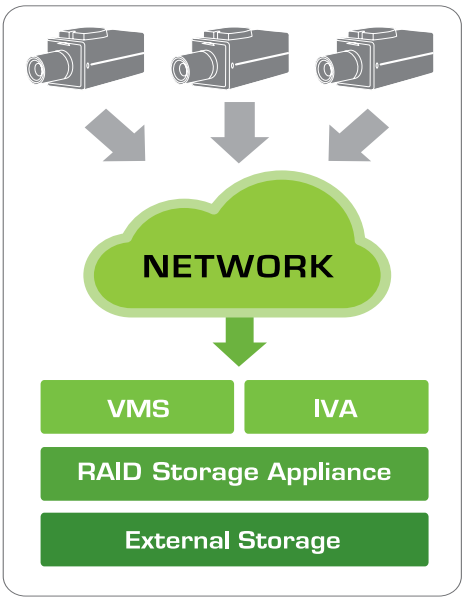
The Vess A2000 Series NVR storage appliance is engineered specifically to be the best solution for midsize to large-scale IP video surveillance deployments. Featuring failsafe protection that provides continuous recording without dropping frames under live playback conditions, it is ideal for 32 to over a hundred full-HD IP cameras, making it perfect for banking, retail, gaming, manufacturing, and many more industries.

Reduces Deployment Costs and Complexity

The Vess A2000 Series reduces support and equipment costs because there is no separate RAID storage unit to manage, eliminating the need for a server, controller cards, external cables, and a separate storage enclosure. Additionally, the Vess A2000 Series reduces interoperability conflicts caused when integrating different hardware.



Generic Practice



PROMISE Proposal

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Integrated Solution - Easier to Manage & Grow

The Vess A2000 Series integrates the recorder and storage in a single solution making it significantly easier to scale as your business grows. Security practitioners can easily scale with no user configuration, just plug and add. When external storage is a must, easily scale up with PROMISE's Vess storage series, creating a total video surveillance solution that combines a recording appliance and external storage.

Support for Security Partners

PROMISE has certified and validated the Vess A2000 appliance with the top solutions in the industry, including applications from AxxonSoft, Genetec, ONSSI, SeeTec, Milestone Systems, and more, offering customers more flexibility when building surveillance deployments. Plus, the Vess A2000 Series now supports the Milestone XProtect plug-in which allows users to manage the Vess A2000 series via the user interface of XProtect, making it significantly more convenient for users to manage their storage.

Surveillance Solution Planner

The Vess A2000 supports the new PROMISE Surveillance Solution Planner, a tool that helps determine the overall installation requirements of a given video surveillance project and makes it easier to build solutions designed specifically for the security requirements of each installation. The planner will calculate the total storage space and bandwidth needed, in addition to the requirements for recording servers and external storage, while also including a topology of the installation for reference. Try it now at: www.promise.com/Solutions/SurveillancePlanner

System Video Throughput

Video Quality (Compression Ratio)	Image Resolution	CODEC	Vess A2200 (Max. Camera#)			Vess A2600 (Max. Camera#)			Image Resolution	CODEC	Vess A2200 (Max. Camera#)			Vess A2600 (Max. Camera#)		
			10FPS	20FPS	30FPS	10FPS	20FPS	30FPS			10FPS	20FPS	30FPS	10FPS	20FPS	30FPS
High	4CIF (704x576)	H.264	176	162	159	Max.	178	177	1080P (1920x1080)	H.264	90	73	55	156	102	87
Medium		H.264	Max.	176	171	Max.	Max.	Max.		H.264	162	90	79	178	156	117
Low		H.264	Max.	Max.	Max.	Max.	Max.	Max.		H.264	176	162	142	Max.	178	172
High		MPEG4	176	162	142	Max.	178	172		MJPEG	55	30	20	87	49	28
Medium		MPEG4	Max.	176	163	Max.	Max.	Max.		MJPEG	77	55	36	108	87	63
Low		MPEG4	Max.	Max.	176	Max.	Max.	Max.		MJPEG	142	77	64	172	108	94
High	720P (1280x720)	H.264	171	159	90	Max.	177	156	3MP (2048x1536)	H.264	82	55	42	132	87	76
Medium		H.264	Max.	171	162	Max.	Max.	178		H.264	159	82	73	177	132	102
Low		H.264	Max.	Max.	176	Max.	Max.	Max.		H.264	171	159	90	Max.	177	156
High		MJPEG	85	64	55	144	94	87		MJPEG	42	25	16	76	42	21
Medium		MJPEG	159	85	77	177	144	108		MJPEG	73	42	30	102	76	49
Low		MJPEG	171	159	142	Max.	177	172		MJPEG	90	73	55	156	102	87
High	1.3MP (1280x1024)	H.264	162	90	82	178	156	132	5MP (2560x1920)	H.264	64	36	30	94	63	49
Medium		H.264	176	162	159	Max.	178	177		H.264	85	64	55	144	94	87
Low		H.264	Max.	176	171	Max.	Max.	Max.		H.264	159	85	77	177	144	108
High		MJPEG	82	55	42	132	87	76		MJPEG	30	16	16	49	21	1
Medium		MJPEG	159	82	73	177	132	102		MJPEG	55	30	20	87	49	28
Low		MJPEG	171	159	90	Max.	177	156		MJPEG	77	55	36	108	87	63

NOTE: The number of camera shown in the chart for Vess A2000 series were tested with Milestone XProtect Corporate®
NOTE: The table is provided as a test-lab result performed by PROMISE based on 200-camera infrastructure and Max. means the number of cameras supported is over 200. These camera count support numbers reflect a recording benchmark assuming 20% live remote viewing and 35% motion recording rate in calculation.

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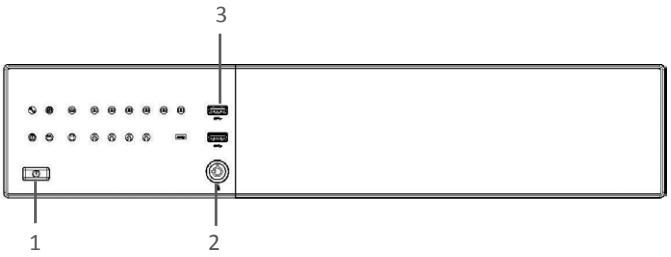
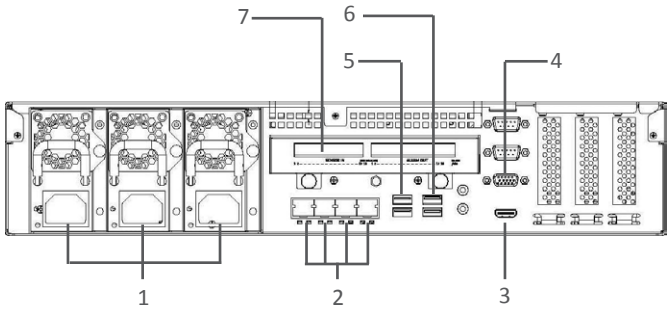
Vess A2200/2600
Front and Back Panels

Vess A2200/2600 Front and Back Panels

Vess A2200

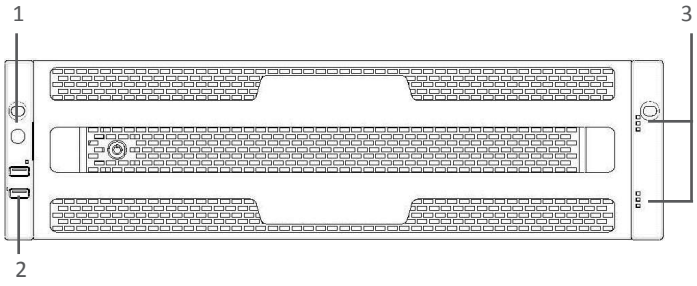


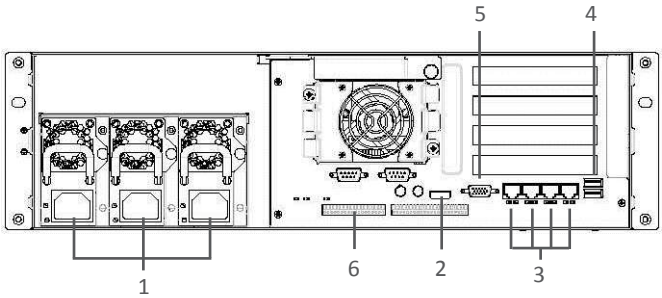


#	Icon	Item	Description
1		Power Button	Turns the device on and off
2		Secure Panel Lock	Provides security for installed hard disks & cooling unit
3	SS	2x USB 3.0 Ports	Compatible with USB 3.0 and earlier devices

#	Icon	Item	Description
1		Redundant Power	3 N+1 power supplies
2		4x Ethernet Ports	For connection to an Ethernet network
3	HDMI	HDMI Port	Connects to HDMI monitor
4		VGA Port	Connects to VGA monitor
5	SS	2x USB 3.0 Ports	Compatible with USB 3.0 and earlier devices
6		2x USB 2.0 Ports	Connects to USB devices
7		IO Terminal Ports	Sensor Input/Alarm Output

Vess A2600





#	Icon	Item	Description
1		Power Button	Turns the device on and off
2		2 USB 2.0 Ports	Connects to USB devices
3		Power & Status LEDs	Indicates drive status and activity

#	Icon	Item	Description
1		Redundant Power	3 N+1 power supplies
2	HDMI	HDMI Port	Connects to HDMI monitor
3		4x Ethernet Ports	For connection to an Ethernet network
4		2 USB 2.0 Ports	Connects to USB devices
5		VGA Port	Connects to VGA monitor
6		IO Terminal Ports	Sensor Input/Alarm Output

**Note: The Vess A2600 is shown with the front bezel attached*

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Technical Specifications

	Vess A2200	Vess A2600
General Information		
Camera Range	32-64	64-128
Form Factor	2U, 19" Rackmount	3U, 19" Rackmount
Number Of Drives	6 Drives (3.5")	16 Drives (3.5")
Drive Type	SATA (6Gb/s* or 3Gb/s), NCQ, TCQ, Hot Swappable	
# of Controllers	Single	
System Processor	Intel® Core™ i3 Dual-core 4-thread	Intel® Xeon® E3 Quad-core 8-thread
System Memory	8GB Default (Max 16GB)	8GB Default (Max 16GB)
I/O Interface	4x Gigabit Ethernet	
Storage Expansion	Optional Vess iSCSI Storage	
Max # of HDDs Supported	Up to 118 drives through iSCSI & JBOD expansion	Up to 128 drives through iSCSI & JBOD expansion
Other Interfaces		
# of USB Ports	4x USB 3.0, 2x USB 2.0	4x USB 2.0
PCI Express Ports	1x 16-lane Gen 2.0 PCIe, 2x 8-lane Gen 2.0 PCIe	1x 16-lane Gen 2.0 PCIe, 3x 8-lane Gen 2.0 PCIe
Graphics	D-sub VGA and HDMI	
Serial Interfaces	2x RS-232C (D-sub 9-pin)	
Audio & Microphone	2x 3.5mm Audio Jack	
Sensor Input/Alarm Output		
Sensor In	Compatible w/ DC3.3V to 24V, photo coupler input x 8	
Alarm Out	Max. DC 24V/1A, mechanical relay output x 8	
RAID Operational Feature		
RAID Levels	0, 1, 1E, 3, 5, 6, 10 (0+1), 30, 50 Any combination can exist at the same time	0, 1, 1E, 3, 5, 6, 10 (0+1), 30, 50, 60 Any combination can exist at the same time
Hot Spares	Multiple global or dedicated hot-spare drives with revertible option	
Max. LUNs per System/Array	256/32	
Software		
Preloaded OS (64-bit)	Windows Embedded Standard 7 Runtime (WS7P), Windows Server 2008 R2 Standard or Linux	
Management Tools	Graphical UI/SNMP via Ethernet, CLI/CLU via Ethernet or Graphics, OPAS Service via USB, SDK or API for Integration	
Appliance Mode	Surveillance Optimization @ Arrays in Normal and Degrade	
Event Notification	Email, SNMP, Buzzer, LEDs	
System Information		
AC Input	100 ~ 240 VAC, 60 ~ 50Hz	
Current (Maximum)	4A (100V); 2A (240V)	
Power Supply	Three redundant 250W, Energy-efficient 80PLUS Certified, 90-264V full-ranging w/PFC, Hot swappable N+1 Design	
BTU	1288 BTU/hr	1729 BTU/hr
Fan	Hot swappable design	
Dimensions (H x W x D)	88.2 x 440 x 400 mm (3.5 x 17.3 x 15.7 in)	130.1 x 446.2 x 461 mm (5.1 x 17.6 x 18.1 in)
Weight	10.4kg(22.9 lbs) w/o drives, 14.9kg (32.8lbs) w/drives	15.9kg(35.1 lbs) w/o drives, 27.9kg (61.5lbs) w/drives
Safety/EMI	CE, FCC Class A, BSMI, CB, KC, UL/cUL, CCC	
Warranty and Support		
Warranty	3 year limited warranty	
Optional Accessories	Sliding Rail, 2/4/8GB DDR3 Memory	Sliding Rail, 2/4/8GB DDR3 Memory

**Hard disk drive still runs at 3Gb/s speed*

Specifications may change without prior notice

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